

REMARKS

Claims 13 and 14 are canceled without prejudice, and therefore claims 1 to 12 and 15 to 19 are now pending.

Reconsideration is respectfully requested based on the following.

In paragraph six (6) of the Office Action, claims 1 to 19 were rejected under 25 U.S.C. 102(b) as anticipated by the U.S. Patent No. 6,141,421 (“Takaragi”) reference.

As regards the anticipation rejections of the claims, to reject a claim under 35 U.S.C. § 102, the Office must demonstrate that each and every claim feature is identically described or contained in a single prior art reference. (*See Scripps Clinic & Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991)). As explained herein, it is respectfully submitted that the Office Actions to date do not meet this standard, for example, as to all of the features of the claims. Still further, not only must each of the claim features be identically described, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed subject matter. (*See Akzo, N.V. v. U.S.I.T.C.*, 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986)).

As further regards the anticipation rejections, to the extent that the Office Action may be relying on the inherency doctrine, it is respectfully submitted that to rely on inherency, the Office must provide a “basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics *necessarily* flows from the teachings of the applied art.” (*See* M.P.E.P. § 2112; emphasis in original; and *see Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int’f. 1990)). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic.

As to claim 1, it is respectfully submitted that the “Takaragi” reference does not identically disclose (or suggest) the feature in which:

*successive bytes during encryption are provided with an index i, where i = 0, 1, 2, . . . ,
an encrypted byte n* is formed from an unencrypted byte n according to the following, a starting value n₋₁ being used for decryption and encryption:*

$$n_{-1} \equiv S_0$$

$$n_i^* = \left(n_i \ll \sum_{j=0}^i n_{j-1}^* \right) \oplus S_{h\left(\sum_{j=0}^i n_{j-1}^*\right)}$$

an unencrypted byte n is formed from an encrypted byte n according to the following:*

$$n_i = \left(n_i^* \oplus S_{h\left(\sum_{j=0}^i n_{j-1}^*\right)} \right) \gg \sum_{j=0}^i n_{j-1}^*$$

The Office Action asserts that “Takaragi” (col. 9, lines 30-45) discloses “cyclically shifting bits and exclusive OR operations”. While “Takaragi” may refer to how a cyclical shift of bits and an exclusive OR operation works, it does not identically disclose (or even suggest) the above cited equations for data encryption and decryption, as provided for in the context of the claimed subject matter. Other than using two basic and fundamental binary operations, the “Takaragi” at col. 9, lines 21-29, does not identically disclose (or even suggest) the above cited equations, as provided for in the context of the presently claimed subject matter. The presently claimed subject matter reflects a new data encryption method using the encryption history, which is not identically disclosed (or even suggested) by the “Takaragi” reference.

Additionally, it is respectfully submitted that the “Takaragi” reference does not identically disclose (or even suggest) the feature in which “no byte-wise allocation between input and output data occurs”, as provided for in the context of the claimed subject matter. The Office Action cites “Takaragi” at col. 5, lines 4-25, but this text only refers to “the open and common key ciphers and the data compression are combined so as not to be separated, thereby enabling those three functions to be simultaneously effectively realized.” This has nothing to do with “byte-wise allocation between input and output data,” as in the claimed subject matter. In fact, “Takaragi” refers to “byte-wise allocation” in the other cited section (col. 9, lines 43-47), in which it states that “the 64-bit input data X₂ and the 32-bit input data Y₂ is expanded to data of total 128 bits.”

Additionally, it is respectfully submitted that the “Takaragi” reference does not identically disclose (or suggest) the feature in which “decrypting the data that had been encrypted in the programming unit using a second key provided in the control unit”. In “Takaragi” Figure 20, element 2017, it is clear that the key is provided in the data stream. In “Takaragi” Figure 19, element 1905, and Figure 18, element 1802, it is plain that the key is

external to element 1901 "Decode and Expansion Function" and element 1801 "Decoder". In "Takaragi", col. 14, line 59 states that the "a key 1905 is inputted" -- i.e., provided *to* the decoder. This does not identically disclose (or even suggest) the feature of "provided *in* the control unit".

For at least these reasons, the reference does not identically disclose (or suggest) the above-discussed features of the claimed subject matter, so that claim 1 is allowable, as are its dependent claims 2 to 6 and 17.

Claim 7 includes features like those of claim 1 and is therefore allowable for essentially the same reasons, as are its dependent claims 8 to 10, and 18.

To facilitate matters, claims 13 and 14 are canceled without prejudice.

Claims 11 (and dependent claim 19), 15, and 16 include like those of claim 1 and are therefore allowable for essentially the same reasons.

It is therefore respectfully submitted that claims 1 to 12 and 15 to 19 are allowable.

Conclusion

In view of the foregoing, it is believed that the rejections (and any objections) have been obviated, and that claims 1 to 12 and 15 to 19 are allowable. It is therefore respectfully requested that the rejections (and any objections) be withdrawn, and that the present application issue as early as possible.

Respectfully submitted,
KENYON & KENYON LLP

Dated: 3/6/2008

By: 

Gerard A. Messina
(Reg. No. 35,952)

One Broadway
New York, New York 10004
(212) 425-7200

33,865

Avan C. (1/5/08)